

STATE of SOUTH CAROLINA
DEPARTMENT OF HEALTH and ENVIRONMENTAL CONTROL

**GENERAL CONDITIONAL MAJOR
OPERATING PERMIT (GCMP-04)**

**CONCRETE BATCH PLANTS
November 01, 2001**

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5) and 48-1-110(a), and the 1976 Code of Laws of South Carolina, as amended, Regulation 61-62, the above mentioned sources are hereby granted permission to discharge air contaminants into the ambient air. The Bureau of Air Quality authorizes the operation of these sources in accordance with the plans, specifications and other information submitted in the General Conditional Major permit application. Sources operating under this general permit wish to limit their potential to emit as defined in South Carolina Air Pollution Control Regulation 61-62.1.

This permit is subject to and conditioned upon the terms, limitations, standards, and schedules contained in or specified on the attached pages of this permit.

Permit Number: GCMP04xxxx-xxxx

Issue Date: November 01, 2001

Expiration Date: October 31, 2006

DIRECTOR, ENGINEERING SERVICES DIVISION
BUREAU OF AIR QUALITY

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PART 1.0. APPLICABILITY

A. GENERAL APPLICABILITY

In accordance with this general conditional major permit, a concrete batch plant and/or concrete block plant may operate under the conditions contained herein if it is comprised of one or any combination of the following: Boilers or other fuel combustion devices less than or equal to 30×10^6 BTU per hour, storage of sand and aggregate, sand and aggregate transfer to elevated bin, cement and/or flyash unloading to elevated storage silo, weigh hopper loading, central mixer loading, and/or truck loading, and the loading, transfer or storage associated with emission control systems. Facilities operating under this permit seek to limit their ?potential to emit? to below the thresholds which define a major source by complying with federally enforceable conditions contained in the permit.

For New Source Performance Standards (NSPS), Subpart A and Dc applicability, new boilers are those constructed, reconstructed or modified after June 9, 1989 and having a heat input capacity ? 10×10^6 Btu/hr and ? 30×10^6 Btu/hr.

B. CRITERIA

This general permit applies to concrete batch and/or block plant facilities meeting all of the following criteria:

- A. The facility is limited to concrete batching operations only.
- B. The plant produces no more than 1,366,560 cubic yards of concrete per rolling year (12 month rolling sum).
- C. The maximum size for a single boiler or multiple boilers in operation at one time is limited to less than 30 million BTU/hr heat capacity input.
- D. Fuel combustion sources at the facility are limited to natural gas, propane, liquefied petroleum gas, virgin fuel oil, or Department approved waste oil streams.
- E. The operational restrictions of the facility limits its potential to emit to below major source thresholds. Specifically, potential for SO₂, PM, and NO_x emissions are less than 100 tons per year and hazardous air pollutant (HAP) emissions are less than 10 tons per year individually or 25 tons per year combined.

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- F. All emergency generators fired on diesel fuel are limited to 250 hours each of operation during the calendar year.
- G. The owner or operator of the facility has submitted a timely and complete application for this general permit to the Department.

PART 2.0. STANDARD CONDITIONS

The following conditions are applicable unless superseded by special permit condition(s):

All conditions marked with an asterisk shall be considered federally enforceable.

- 1. Permit expiration terminates the source's right to operate unless a complete renewal application has been submitted by the application renewal date. Upon receipt of an application for renewal, the source may continue to operate subject to final action by the Department on the renewal application.
- 2. An operating permit modification or renewal may be issued upon evidence of satisfactory operation during the prior operating period and receipt of a complete application.
- 3. This general permit has been issued based on information submitted by the owner/operator in the application. Any false information or misrepresentation in the application may be grounds for permit revocation.
- * 4. This general permit expressly incorporates all the provisions of South Carolina Department of Health and Environmental Control Regulation 61-62.1, Section II.C.
- 5. No deviation from the plans and specifications reflected in the permit application as submitted is allowed, unless authorized in writing by the Bureau.
- 6. This general permit only covers emission sources and control equipment while physically located at the permitted plant location. Unless the permit specifically provides for equipment relocation, this general permit is void for an item of equipment on the day it is removed from the permitted location, notwithstanding the expiration date specified on the permit.
- * 7. Whenever the ownership/operation of a facility has been transferred, the Bureau shall be notified by the new owner/operator within thirty (30) days of the transaction. A transfer of this permit will be effective upon written approval by the Department.

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- * 8. In accordance with SC Regulation 61-62.1, Section II, the permittee must comply with all applicable statutes and regulations of the United States and the State of South Carolina. This permit does not relieve the permittee from compliance with applicable local laws, ordinances, and regulations. The Department may grant permission to proceed with minor alterations or additions without issuance of a permit when the Department determines that the alteration or addition will not increase the quantity and will not alter the character of the source's emissions. Any owner/operator who plans to construct, alter, or add to a source of air contaminants, including the installation of any device for the control of air contaminant discharges shall submit a complete construction permit application package. The construction of the new or modified source shall not commence until the source has received an effective permit to construct from the Department.

- * 9. For all sources not required to have continuous emissions monitors the owner/operator shall, at all times, including periods of startup, shutdown, and malfunction, maintain and operate these sources in a manner consistent with good air pollution control practice for minimizing emissions to the maximum extent practicable. In accordance with S.C. Regulation No. 61-62.1 Section II(C)(3), in the event of any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the local Environmental Quality Control (EQC) District office within twenty-four (24) hours after the beginning of the occurrence. The owner/operator shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ). The report shall contain as a minimum, the following: the identity of the emission point and associated equipment where excess emissions occurred, the magnitude of excess emissions, the time and duration of excess emissions, the steps taken to remedy the malfunction and to prevent a recurrence, documentation that control equipment and processes were at all times maintained and operated, to the maximum extent practicable, in a manner that was consistent with good practice for minimizing emissions. Such a report shall in no way serve to excuse, otherwise justify, or in any manner affect any potential liability or enforcement action resulting from the occurrence.

- 10. Any authorized agent of the Department, upon presentation of credentials, shall be allowed to enter the grounds of this facility during reasonable hours, to inspect any equipment required to be kept, used, calibrated, and maintained under this permit; to obtain samples of emissions; to have access to and a right to copy records required under this permit; to photograph and use monitoring and testing equipment for the purpose of monitoring and preserving information on activities, discharges or emissions authorized by this permit.

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11. The general permit for the facility may be reopened for cause by the Department or to include any new standard or regulation which becomes applicable to a source for which three or more years remain on the original term of the permit.
- * 12. The permittee shall pay fees in accordance with SC Regulation 61-30, SC Environmental Protection Fees
- * 13. In accordance with South Carolina Regulation 61-62.1, Section III, every even calendar year an emissions inventory will be completed for the previous calendar year and submitted to the Department by March 31. The above requirement notwithstanding, an emissions inventory may be required at any time in order to determine the compliance status of any plant.
14. No deviation from the plans and specifications submitted with the construction permit application or the conditions specified herein is permitted, unless authorized in writing by the Department. The owner/operator is responsible for satisfactory compliance with all Air Pollution Regulations /and Standards.

PART 3.0. SPECIAL CONDITIONS

This permit is subject to all standard conditions contained herein and to the following special conditions. **All conditions or requirements marked with an asterisk are considered federally enforceable.**

A. EMISSION LIMITATIONS

Air pollutant emissions shall not exceed the following.

<u>IDs</u>	<u>Pollutant</u>	<u>Emission Limitation</u>	<u>Test Method</u>
Boilers, (NSPS Subpart Dc)	SO ₂	0.5 lbs/10 ⁶ BTU ³	6
	PM	0.6 lbs/10 ⁶ BTU ³	5
	Opacity	20% ³	9
Boilers (SC Reg 61-62.5 Standard 1)	SO ₂	3.5 lbs/10 ⁶ BTU ³	6
	SO ₂	2.3 lbs/10 ⁶ BTU ^{1,3}	6
	PM	0.6 lbs/10 ⁶ BTU	5
	Opacity	20% ³	9
		40% ^{2,3}	9
All other operations	PM	62.4 lb/hr	5
	Opacity	20% ³	9
		40% ³	9

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¹Applies to all sources in Charleston County greater than 10 MMBTU/hour.

²Applies to fuel burning operations constructed prior to February 11, 1971.

³ Emission limitations are federally enforceable.

The above emission limitations are derived from various Federal and State regulations that govern the operation of these sources. Operation at other than reported capacity must meet emission limits as specified in the applicable regulations based on that operating rate but shall not exceed the values reported to the Department for proof of compliance with South Carolina Regulation 61-62.5, Standards 2, 7 and 8. All test methods must be the most recent revisions that are published in the Code of Federal Regulations (40 CFR 60, Appendix A) as in effect on the date of this permit issuance, or otherwise approved by the Bureau.

B. RECORD KEEPING AND MONITORING REQUIREMENTS *

The owner/operator shall keep records of required monitoring information in accordance with specifications set by the Department. This includes all of the following:

1. The date, place, and time of sampling measurements.
2. The date(s) analyses were performed.
3. The company or entity that performed the analyses.
4. The methods or analytical techniques used in the analyses.
5. The results of all such analyses.

The owner/operator shall also maintain records of the following monthly monitoring:

1. Records of monthly concrete production in cubic yards of concrete per month including a twelve month rolling sum of concrete production.
2. Facilities that have gained authorization for the use of recycled oil as fuel must maintain the following information for each shipment: date and total amount of specification oil received, chemical analyses on the fuel oil for: total halogen, total lead, total chromium, total cadmium, total arsenic, total nickel, percent (%) sulfur and BTU content; additionally all shipments or batches shall be certified as PCB free. Copies of all analysis shall be kept.
3. Records of emergency and portable generator(s) use in hours per month (to be reported yearly on a calendar year basis) and a twelve month rolling sum of hours of operation for non-emergency generators.

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Records of all required source testing, monitoring data, and support information shall be retained on site for a period of at least five (5) years from the submittal date of the initial application. Support information includes any relevant documentation from the supplier(s) of the fuel oil, fuel analysis as applicable, fuel usage, concrete production, and copies of all reports required by the permit. The Department must approve any alternative method of monitoring or record keeping.

C. REPORTING REQUIREMENTS *

The owner/operator shall meet the following requirements with respect to reporting:

1. Submit **quarterly reports** of required monthly monitoring information except for emergency and portable generators. Emergency and portable generator use is to be reported yearly on a calendar year basis. The Department may, after the first twelve months of initial coverage, decrease the frequency of reports based on actual emissions. Requests for a decrease in reporting frequency should be made in writing to the Manager of the Technical Management Section, Bureau of Air Quality. During permit renewal, a request for a decrease in reporting frequency may be included in the renewal application under Part H., *Monitoring, Recordkeeping, and Reporting Plans*.

If a decrease in reporting frequency has been approved prior to renewal of a permit, the reduced reporting frequency may be continued after renewal provided that actual emissions have not changed.

If a facility is reporting at a decreased frequency and actual emissions increase, the Department may require an increased reporting frequency.

2. All reports should be addressed to the Manager of the Technical Management Section, Bureau of Air Quality, and should be post marked no later than 30 days following the end of the reporting period.

D. CONTROL EQUIPMENT *

The owner/operator shall, to the extent reasonably practicable, maintain and operate any source including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. In addition, the owner/operator shall maintain a log of the time, magnitude, duration and/or any other pertinent information necessary to determine periods of startup, operation, shutdown and malfunction of a permitted facility or any periods during which a continuous monitoring system or monitoring device (if applicable) is inoperative. These records shall be maintained on site for a period of no less than five years following the event and shall be made readily available to representatives of this Department upon request.

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E. OPERATIONAL FLEXIBILITY

The following operational scenarios are allowed. No further action is required by the owner/operator prior to making the changes described below.

1. The use of a fuel oil with a lower sulfur content than what was submitted as part of the permit application.
2. On site unit relocation, provided that the permittee has demonstrated compliance with emission limitations at the new location, specifically the limitations contained in SC Regulation 61-62.5, Standards 1, 2, 7, and 8.

F. EXEMPT EQUIPMENT OR PROCESSES

The following is a list of equipment or processes emitting regulated air pollutants which are exempt from permitting due to insignificant emissions:

1. Emergency power generators of less than 150 KW rated capacity, or those which operate 250 hours per year or less and have a method to record the actual hours of use such as an hour meter.
2. Boilers and space heaters rated at less than 1.5×10^6 (1.5 million) BTU per hour heat input capacity which burn only virgin fuels.
3. Each storage tank with a capacity less than 40 cubic meters (10,547 gallons) that stores organic liquids, excluding those that store a hazardous air pollutant except as an impurity.
4. Lab-scale and testing operations used for the purposes of research and development and/or quality control only.
5. Any equipment used solely for the purpose of fire-fighting.

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G. ADDITIONAL CONDITIONS

1. The cement and/or flyash silos shall not be operated without all control devices on-line and operating.
2. The cement and flyash silo baghouse shall be inspected for leaks and visible emissions in the exhaust while the silo is being loaded.
3. Ruptured or inoperative bags shall be replaced promptly. The Permittee shall maintain an inventory of filter bags such that an adequate supply of bags are on hand to replace any defective bags in each baghouse.
4. System pressure drop gauges and cleaning cycle timers shall be installed, operated and maintained on each baghouse (excluding bin vent baghouses).
5. Loading of concrete on the trucks shall be conducted with a boot if so listed in application.
6. Inspection for proper operation of the boot shall be conducted while load-out is occurring at least once each week.
7. Fugitive emissions of PM₁₀ must be controlled by wet suppression, chemical dust suppressants, or in any other manner which has received prior approval from this Bureau. The control of fugitive emissions shall include, but not be limited to, the property around the batch plant itself and **all** entrances through which motor vehicles travel.
8. Sand and aggregate piles must be kept as wet as necessary to prevent visible dust emissions.
9. Prior to the expiration date of this general conditional major operating permit, a representative of the Department may conduct a facility inspection. The findings of this inspection, past record of compliance, and future probability of compliance will be given appropriate weight in making the decision regarding permit renewal.
10. Natural gas, propane, liquefied petroleum gas, fuel oil and/or recycled oil (with prior written approval from this Department) shall be the only fuels used in boilers with all fuel usage data added to appropriate compliance reports.

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- * 11. Each storage tank subject to 40CFR60, NSPS Subparts A and Kb shall comply with all requirements for notifications, monitoring, record keeping, and reporting required in these regulations. Records of tank size and type of material stored shall be maintained on any tank constructed, reconstructed, or modified after July 23, 1984.
- * 12. The permitted facility shall have emission limitations less than 100 TPY for SO₂, CO, PM₁₀ and NO_x (each pollutant) and less than 10 tons per year individually or 25 tons per year combined of any HAP. Compliance with these limitations will be demonstrated by twelve (12) month rolling sums of concrete production.
- * 13. Total yearly concrete production shall not exceed 1,366,560 cubic yards.
- 14. Facilities that have the authorization to burn recycled/waste oil as fuel shall maintain records of the following information:
 - a. For each shipment, date and total amount of specification oil received.
 - b. On site generated specification oil usage and dates.
 - c. Chemical analysis of the fuel oil for total halogens, total lead, total chromium, total cadmium, total arsenic, total nickel, percent sulfur and BTU content shall be performed on each shipment or annual sampling of on site batches.
 - d. Constituents for the fuel oil can not exceed those defined for ?specification?oil in SC Regulation 61-62.1.

Supplemental Limiting Reference Chart

	Concrete Production	Recycled Fuel	Generator Use	Emergency Generator Use
L I M I T	1,366,560 yd ³ /yr based on 100% potential to emit.	*See SC Regulation 61-62.1	*See Cover Sheet	250 hours per year

- 15. The use of any non-specification oil, hazardous waste, or any other waste chemical as a fuel or any addition of these items to the fuel shall not be allowed without prior written approval from the Department.

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16. This facility must gain approval from this Department prior to relocation to any other site in South Carolina.
17. All boilers subject to 40CFR60, NSPS Subparts A and Dc shall comply with all requirements for notifications, monitoring, testing, record keeping and reporting required in these Regulations. If applicable, this includes supplier certification of the fuel to ensure sulfur content of 0.5% or less and semi-annual reports of such certification.
18. If the EPA determines that area sources subject to NSPS or NESHAP requirements must obtain Part 70 permits, sources shall submit Part 70 permit applications by December 9, 2005. Sources must continue to comply with the provisions of all applicable NSPS and NESHAP standards. Cold batch halogenated solvent cleaners are exempt from Part 70 permitting.
19. Prior to the expiration date of this general conditional major operating permit, a representative of the Department may conduct a facility inspection. The findings of this inspection, past record of compliance, and future probability of compliance will be given appropriate weight in making the decision regarding permit renewal.

